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2.1.3 7
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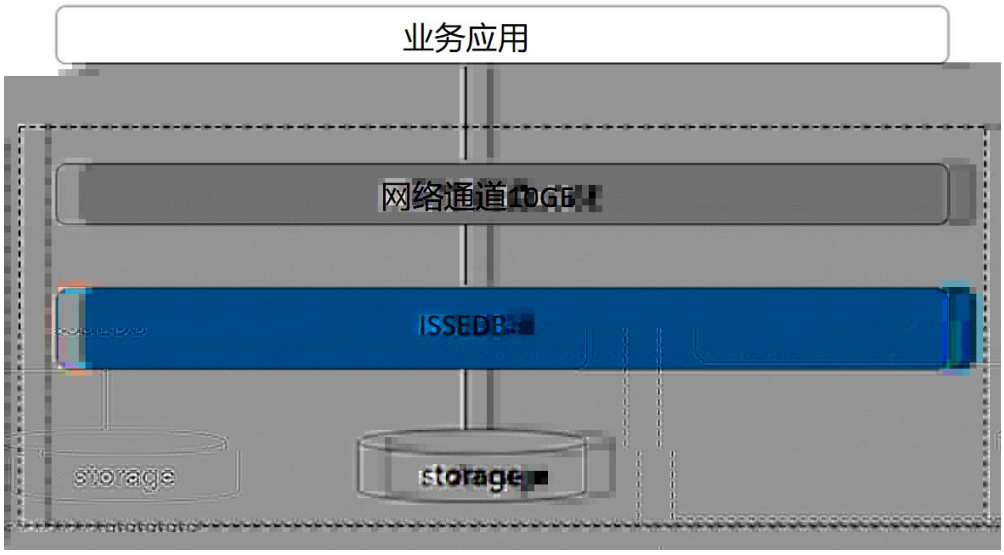

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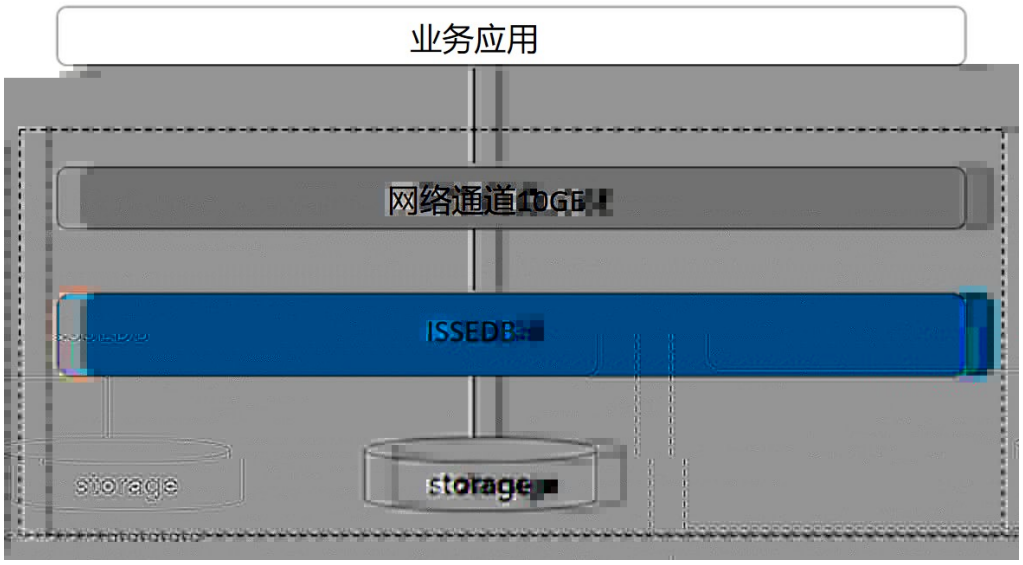

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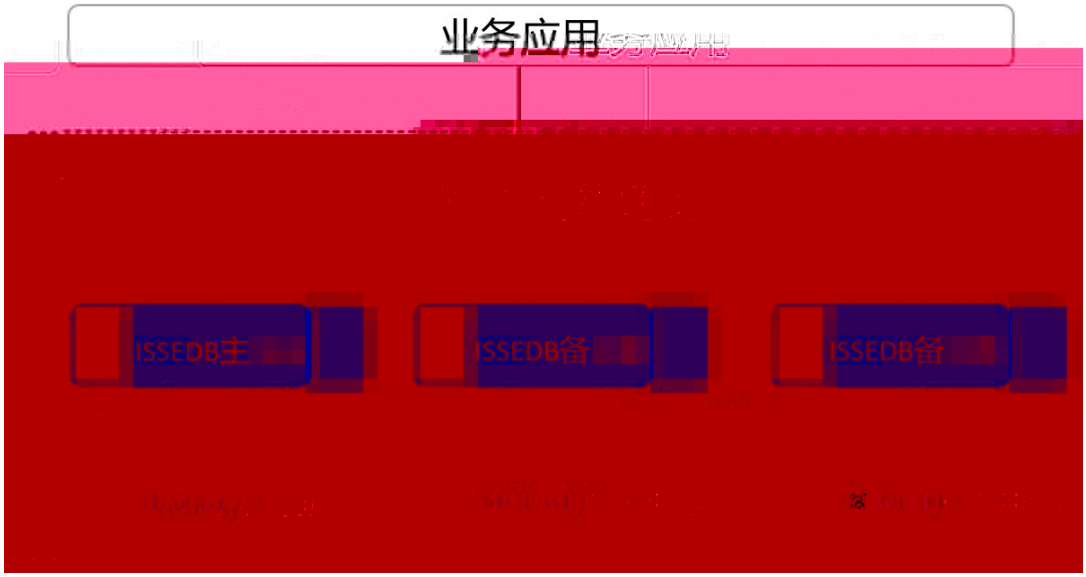

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lscpu
cat /etc/os-release
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lscpu
cat /etc/os-release
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Model name:            Intel( ! "ore(#M! i$-8%%&' "(' ) *+8&,-.
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%um &'sta!! 7% gcc gcc7cEE ma"e cma"e bu&!d7esse'8a! M!&b7de/e! !&bP7de/e! $pe'ss!7 de/e! s !&te7de/e!

Dget hNps◊<<#ep$.huaDe&c!$ud.c$m<p%th$'<3.6.4<1%th$'73.6.4.tgM

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.<c$'Rgu#e 77p#eRFA<us#<b&'<p%th$'3.6.4 7e'ab!e7sha#ed

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eFp$#t 1-2GA<us#<b&'<p%th$'3.6.4<b&'◊S1-2G

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```
sudo ;ire<all-cmd --state
sudo s7stemctl status ;ire<alld+service
```

2 Z 3 X N O À Á Â

```
sudo s7stemctl stop ;ire<alld+service
```

2 Z 4 X N O £ k j k À Á Â

```
sudo s7stemctl disa8le ;ire<alld+service
```

2 Z 5 3 4 N O g , Â

```
sudo ;ire<all-cmd --state
sudo s7stemctl status ;ire<alld+service
```

& ' Y # ; ó ä)

2 Z 1 n , ä) ù N O 2 5 Â

```
;ire<all-cmd --.one1pu8lic --permanent --add-port1%4=9/tcp
```

2 Z 2 ˆ n Ý ¼ N O 2 5 Â

```
;ire<all-cmd --reload
```

2 Z 3 4 f ä) F G Â

```
;ire<all-cmd --list-port
```

‰ F @ (1 ä) > · @ À Á © \ ß ä) v » Ë 6 © V W ä R] P Â

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(SS)D*	5432	À Á ä)
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'tp	123	'tp \ ß ä)
G-S	55434	9 : B ! ^ ä)
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D5S	2379	D5S ó Ÿ _ ä)
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& – ý # @ / © ì b T , · Q Ò ì b

2 Z 1 î #$$t » [x L M : ; Â

2 Z 2 <us#<sha#e<M$'e&'U$< w x ‰ © ì b ! c d · <etc<!$ca!8me ! v ®

T , ì b K ì ó Â

```
cp /usr/share/.onein;o/>     />      /etc/localtime
```

& – Y # s T ì ó

2 Z 1 î #$$t » [x L M : ; Â

2 Z 2 Å ¸ date 7s ‰ Š T , ì b K ì ó Â

î T , ò — ì ó · 2020708703 14Q15Q00 · Ã Â

```
date -s 29&9&-&8-&= *4:*%:&&2
```

2 Z 3 : ; ì ó b … À ! ì ó Â

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h<clock ?<
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§ • l / ~ v • 'tpd ch#$'%d À Á · , ì ó Ò 2 Â L M 2 Z î

• 'tpd À Á · Ã Â

2 Z 1 7 8 'tpd À Á Â

```
7um install -7 ntpd
@"ent64   ed-at          chron7d     ntpd     !  " #
chron7d$ntpd%&  ' ( ) * + , - . /  0
@
@1 2 3 ntpd       4 5 6 3 chron7d    0
@
@AAA
s7stemctl disa8le chron7d BB s7stemctl stop chron7d
AAA
```

2 Z 2 a z · , ! Â

^ ¢ e f X è 'tp À Á ± v g ^ · 192.168.100.100 v § î · , Ñ / > Ä l

'tp À Á ± ì ó Â a z • § 9 : ’ ú / ©<etc<'tp.c$'U ! #

L M w © ž h 421 Se#/e# K | £ i æ « Ò 2

```
server *C9+*68+*&&+*&& pre;er
dri;t;ile /var/li8/ntp/dri;t
8roadcastdela7 &+&&8
```

^ ¢ W Ñ Ö $ © ì ó À Á ± v § î l m 9 : © k ú / M · ì ó À Á ± Â l m ý ú / · 'tp À Á ± { î l / 192.168.100.1 · Ã ~ è l m © / · , <etc<'tp.c$'Ü ! #

```
server *9$+*9$+*+&
;ud:e *9$+*9$+*+& stratum *&
dri;t;ile /var/li8/ntp/dri;t
8roadcastdela7 &+&&8
```

a z • § 9 : | š / ©<etc<'tp.c$'Ü ! #

```
server *C9+*68+*&&+* pre;er
dri;t;ile /var/li8/ntp/dri;t
8roadcastdela7 &+&&8
```

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```
s7stemctl start ntpd
s7stemctl ena8le ntpd
s7stemctl status ntpd
```

2 Z 4 ® l 5 Ù Ú • ì ó À Á ± ; " ˜ ¼ À Á v 5 Ù Ú ¤ 3 4 @ / ì ó ž Ò 2 Â

```
date
```

2 Z 5 ì ó Ò 2 ¤ v è @ / : ; ì ó b … À ! ì ó Â

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h<clock ?<
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ï ð n # 1048576 Â

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```
s7sctl ;s+aio-max-nr1D*&48%$6D
```

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è L&'uF 6 K 7 v R!e7maF © n † ¢ / ³ ´ • ‹ maF_R!es_pe#_p#$cess R Â
T , • $ #

```
s7sctl ;s+;ile-max1D$6$946&&D
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S) 9 9 SL # ’ ú • ¯ ƒ set • ¯ ƒ Ò ú v Ò n 250 Â
S) 9 9 4S # L&'uF : ; • ¯ ƒ Ò ú v ù ñ n 32000 v ®
S) 9 9 SLVS) 9 9 4(Â
S) 9 61 9 # S) 9 61 : ; r s © • ¯ ƒ Ò ú v ù ñ n 100 < = ®
S) 9 9 SL Â
S) 9 9 4(# L&'uF : ; • ¯ ƒ set Ò ú v Ò ñ 128 Â
&pcs 7! ¡ &pcs 7u 4 f • ¯ ƒ Â
’ 16 ú & ý v ’ • ¯ ƒ N ” 17 ú • ¯ ƒ Â § N ” ö Ž "e#'e!.sem n Â
S) 9 9 SL t G • ¯ ƒ v S) 9 9 4(t G Â
T , • $ #

```
s7sctl kernel+sem1D4&C6 9&C$*%9&&& 4&C6 %*9&&&D
```

l ‹ ¨ Ü ö A ¢ X u v ® : ; ¢ X { Í t T , · 80 J ~ < 1- ,)_S(.) v l ‹ T , v Ñ § „ ø j k w ê Â
5 # b%te
Ã # • d ¢ X · 128 , * v 1- ,) · 4096 v ç "e#'e!.shma!!A128V1024V1024V1024V0.8W<4096A26843545 Â
• getc$'U 1- ,)_S(.) ‰ Š 4 f page_s&Me Â
¢ X N P ‘ b%tes Â
T , • $ #

```
s7sctl kernel+shmall1D9684=%4%D
```

I ‹ G Ò 5 ú ö A ¢ X [{ Í t · sha#ed_buXe# n ~ v › ® :
; ¢ X V0.5 Â
5 # b%tes
Ã # • d ¢ X · 128 , * v ç #
"e#' e!.shmmaFA128V1024V1024V1024V0.5A68719476736 Â
¢ X N P ‘ b%tes Â
T , • $ #

```
s7sctl kernel+shmmax1D68$*C4$6$=6D
```

I ‹ : ; $ x ¢ ö A ¢ X [© Ò ƒ Â
\ ß n # 4096 Â
’ ú (SS)D* 9 : ù ñ 2 ú ö A ¢ X [Â
T , • $ #

```
s7sctl kernel+shmmni1D8*C9&&D
```

I ‹ G r s Ì å y F © ‹ © Ò w Â
&ptab!es N O z G Q Â
T , • $ #

```
s7sctl net+core+netdev_max_8acklo:1D*&&&&D
```

I ‹ G > (Ê { | © ¢ X \ ß n Â
5 # b%tes Â
T , • $ #

```
s7sctl net+core+rmem_de;ault1D969*44D
```

I ‹ G > (Ê { | © ¢ X Ò n Â
5 # b%tes Â
T , • $ #

```
s7sctl net+core+rmem_max1D4*C4=&4D
```

l ‹ G > < Ì { | © ¢ X \ ß n Â

5 # b%tes Â

T , • $ #

```
s7sctl net+core+<mem_de;ault1D969*44D
```

l ‹ G > < Ì { | © ¢ X Ò n Â

5 # b%tes Â

T , • $ #

```
s7sctl net+core+<mem_max1D4*C4=&4D
```

l ‹ G s$c"et ! ^ © bac"!$g { y F ~ 7 Â

\ ß n # 128

T , • $ #

```
s7sctl net+core+somaxconn1D4&C6D
```

l ‹ G >(4_ ; -(2_2 g , © < ì ì } Â

5 # Đ Â

Ý ~ • & Ê 9 Â

T , • $ #

```
s7sctl net+ipv4+tcp_;in_timeout1D%D
```

l ‹ G € < • © , u ƒ v < Ã l ‹ ¤ , u • å ? = Â

5 # bt%es Â

T , • $ #

```
s7sctl vm+dirt7_8ack:round_87tes1D4&C6&&&&&D
```

l ‹ G , © Ã 8 ì ó v < Ã l ì ó : ; ÷ , b å ? = Â

5 # Í Ù ý Đ Â

Q /m.d&#t%_eFp&#e_ce'8secs n ƒ © , u v é • å ? = Â

b6%ãe(îhõH÷

î ‰‰ Š 3000 t G 30 Đ Â

T , • $ #

```
s7sctl vm+dirt7_expire_centisecs1D=&&&D
```

I ‹ G , Í Ù Q v < Ã õ ú Í Ù Q v n © (6 Ë • ÷ é ` „ v … å ,

é b ? = Â

T , • $ #

```
s7sctl vm+dirt7_ratio1D8&D
```

I ‹ G ¯ } ì ó v ¤ ú • , u & ÷ é † ‡ ý o v 3 4 ž Ñ { X N ” ˆ

d Â

5 # Í Ù ý Đ Â

‹ T , · 100 t G 1 Đ v ^ ‰‰ Š 50 t G 0.5 Đ Â

T , • $ #

```
s7sctl vm+dirt7_<rite8ack_centisecs1D%&D
```

I ‹ G ¢ X Ù · ¹ º v § l n # 0 ¥ 1 ¥ 2

0 # G ¢ / 3 4 ž Ñ ø © § ¢ X ¼ & • v ^ ¢ Ñ ø © §

¢ X v ¢ X ‰ Ë r s < ç v ¢ X ‰ Ë Ø # v û + ê ë £ Š & Â

1 # G ¢ / r s Ù · Ñ © • d ¢ X v ® Ö c ò — © ¢ X g , ^ Þ Â

2 # G ¢ / r s Ù · < Ã Ñ • d ¢ X K ? P * ó . K © ¢ X Â

è Ù · ¢ X ì /m.$/e#c$mm&t_mem$#1"d0.$êãeH()#Xp

T , • $ #

```
s7sctl vm+s<appiness1D6&D
```

I ‹ § î T , B k , ä) Ù · $ x v i Œ ! ^ ä) Â
T , × A $ # , G , × A B i ˜ Ÿ 1 / D
, × Å V • ó ô @

```
s7sctl net+ipv4+ip_local_port_ran;e1D4&&&& 6%%=%D
```

! • 2 ã %

I ‹ G 5 ú & § Ù · © Ò ! Â R Ñ • ¯ R S { G ¥ ^ _ ¥ . Æ ¥
'

"e% G ‹ 2

/a!ues G T , © ‹ n v ‹ n ‹ • Ÿ Â

2 Z 3 ˆ ¼ · , v • | è Ö 6 ©Æ Ç ‰ • ½ Â

```
s7sctl -p
```

& } Y # ‘ ƒ T , ¢ / ‹

2 Z 1 î #$$t » [x L M : ; Â

2 Z 2 a & ¢ / ‹ · , ! <etc<s%sct!.c$'Ù v ¢ / • € b … ! ’ “ Â

ò : ; • d ¢ X ›0 8 , ì v N ˆ n U ¢ / ‹ T , Ã "e#'e!.shma!! K

"e#'e!.shmmaF © n Â

î ‰ ¢ / ‹ Ã ò ¼ ‹ Œ v ^ N Ý ´ T , N q É ‹ K Ë 6 Æ Ç ¸

T , Â

```
;s+aio-max-nr1*&48%$6
;s+;ile-max1 $6$946&&
kernel+sem 1 4&C6 9&C$*%9&&& 4&C6 %*9&&&
kernel+shmall 1 9684=%4%         E pa:esF  8&G M0M or hi:her
kernel+shmmax 1 68$*C4$6$=6     E 87tesF  8&G M0M or hi:her
kernel+shmmni 1 8*C9&&
net+core+netdev_max_8acklo: 1 *&&&&
net+core+rmem_de;ault 1 969*44
net+core+rmem_max 1 4*C4=&4
net+core+<mem_de;ault 1 969*44
net+core+<mem_max 1 4*C4=&4
net+core+somaxconn 1 4&C6
net+ipv4+tcp_;in_timeout 1 %
vm+dirt7_8ack:round_87tes 1 4&C6&&&&&
vm+dirt7_expire_centisecs 1 =&&&
vm+dirt7_ratio 1 8&
vm+dirt7_<rite8ack_centisecs 1 %&
vm+overcommit_memor7 1 &
vm+s<appiness 1 &
net+ipv4+ip_local_port_ran:e 1 4&&&& 6%%=%
;s+nr_open 1 9&48&&&&
```

2 Z 3 • € b … U ‘ ¤ æ X ” ‡ Â

```
:<H
```

2 Z 4 ˆ ¼ · , v • | è Ö 6 ©Æ Ç ‰ • ½ Â

```
s7sctl -p
```

· ,

2 Z 1 4 f ž ^ ¢ ž • ; j ç ž d‰ab!ed v e ; j ç ž

vi /etc/sv'c/sv'e)P$een;giÂ

```
:eten;orce
```

2 Z 2 – ì X S

```
seten;orce &
```

3 2 Z 3 Ÿ Ã ö Ž · , ! è Ï X S)L(40K Â

1¥ a z · , ! Â

```
vi /etc/selinux/con;i:
```

2¥ S)L(40KAe'U$#c‰'g ö Ž · S)L(40KAd‰sab!ed Â

3¥ ^ j : ; Â

```
re8oot
```

x & [x · ,

(SS)D* 7 8 ì N ” #$$t — » x & [x Û ‘ 6 7 v § î Ÿ Ã ^ ‰ 2 Z T , •

#$$t » x & [x Â

1¥ 2 Z 1 î #$$t » [x L M : ; Â

```
service sshd restart
```

‹ · ,

™ o 7 8 ì N ” · , (15 ‹ Â

” • €

ò 3em$/e(15A%es ì v L M : ; ÷ è » ” ‡ ì v • š l » © (15 ³ ´ { ö A

¢ X [K • ¯ ƒ ~ v ® • › (SS)D* À Á ± • © (15 ³ ´ é ˆ d v § Æ <

œ 6 v î N ” T , 3em$/e(15 ‹ · '$Â

L M 2 Z

2 Z 1 î #$$t » [x L M : ; Â

2 Z 2 … <etc<s%stemd<!$g&'d.c$'U ! v 4 f ž e f T ,

3em$/e(15A'$ v ^ ¢ W Ñ ç Å ¸ 2 Z 3 v ç R Ã Â

```
vi /etc/s7stemd/lo:ind+con;
```

2 Z 3 è · , ! ’ “ n , · , : 3em$/e(15A'$Â

2 Z 4 …<us#<!&b<s%stemd<s%stem<s%stemd7!$g&'d.se#/&ce ! v 4 f ž e f

T , 3em$/e(15A'$ v ^ ¢ W Ñ T , ç Å ¸ 2 Z 5 v ç R Ã Â

```
vi /usr/li8/s7stemd/s7stem/s7stemd-lo:ind+service
```

2 Z 5 ö Ž • Ý · , : 3em$/e(15A'$Â

2 Z 6 ˆ n Ý¼ · , ‹ Â

```
s7stemctl daemon-reload
s7stemctl restart s7stemd-lo:ind
```

2 Z 7 3 4 ö Ž ž • ½ Â

```
lo:inctl sho<-session I :rep  emovel("
s7stemctl sho< s7stemd-lo:ind I :rep  emovel("
```

T , 3 ž n { § l ~

@ / K ? P 6 © 3 ž 920 n { Ò S T 5 Å ~ T , · Q Ò

{ 920 n Ÿ 1500 ~ v ï ð n # 8192 { 920 n § N ” £ ¸ ö Ž ~ Â N ” 5 Ò

? P 6 ý • ö Ž { ö Ž & – Ë Ï ? P 6 ¡ b ~ Â

2 Z 1 î #$$t » [x L M : ; Â

2 Z 2 Å ¸ ^ ‰‰ Š v T , 3 ž 920 n Â

3 ž a ¯ § Ÿ Ã ‰p a‰ Š 4 f Â

& – ý #

```
Ei;con;i: • € • , mtu ƒ
i;con;i: eth& mtu 8*C9
```

& – Y #

```
cat /s7s/class/net/ • € • , /mtu
echo 28*C92 @ /s7s/class/net/ • € • , /mtu
```

• Ý q ' V ç { § l ~

".&." Z „ …

† ‡ ˆ t

! -

(1 • € ä) · ,

l 6 2	‰s$+'$de2	l m l 6 2
(1 B ¢	192.168.146.162	(1
ä) ¯	26000	D*'$de ! ^ ä)

» 2 V W

			!
3 7 8	9 : :	; <	= > ? @
A 8	BCDEF	; <	= > ? @

! w x V W

"	# $	" % &
G9FHGI9JHKLEMGNIIMBC	I9JHKLEM	O P Q R S T U V
G9FHGNIIMBCGNWIHLXXGLFF	YZZ[\]^FF_LH`	a b c O P U V
G9FHGNIIMBCGX9D	YZZ[\]d9D_LH`	e f U V
G9FHGNIIMBCGNWIHLXXGBLHLGBCg	BLHLh9BMg	i j a b S T U V
G9FHGNIIMBCGH:F	H:FkFFBC_LH`	l mR U V
G9FHGNIIMBCGNIIMBCH99XIG9:	YZZ[\]n99X_LH`	a b c o p U V
G9FHGNIIMBCGq9EMJNXM	q9EM_LH`	a b c q9EM mR U V

T , @ / l 6 2 •

2 Z 1 Ù ô è @ / Å ¸ #

```
5i /etc/hostname
hostnamectl set-hostname iso;tnode9 E I      ‰ Š 6 *C9+*68+*46+*69 ‹ : ;
```

2 Z 2 T , @ / <etc<h$sts

```
vi /etc/hosts
*C9+*68+*46+*69 iso;tnode9
```

£ Í 7 8 » K w x

2 ℤ 1 î #$$t » [x L M : ; Â

2 Z 2 £ Í 7 8 » { § £ j ~ v T ! " Þ 8 { N ” ˆ q T … 2 o

ü U ¦ ý ø ~ Â

```
useradd -m omm
pass<d omm)9&9=
```

£ j © L M : ; » 2 § 7 8 v ! ¤ K ¤ l N ” ¸ Q]

```
NIIMBC so;t nproc unlimited
NIIMBC hard nproc unlimited
NIIMBC so;t stack unlimited
NIIMBC hard stack unlimited
NIIMBC so;t core unlimited
NIIMBC hard core unlimited
NIIMBC so;t memlock unlimited
NIIMBC hard memlock unlimited
NIIMBC so;t no;ile *&94&&&&
NIIMBC hard no;ile *&94&&&&
```

…

__ ~ ™ ¦

: ; † 1 2 · ,

™ $ Ù ¢ ³ R l m / L M : ; 1 2 ¸ · , v î ‰ L M 5 û N •

#$$t » Å ¸ Â

N O · ,

X N O v ; j ä) Â

· ,

– ì è Ï X S)L(40K Â

ì ó Ò 2 · ,

j k 9 : — ¥ ¦ ¸ ý o ì ó Ò 2 Â

x & [x · ,

T , #$$t r s x & [x Â

: ; ¢ / ‹ · ,

: ; 1 2 Ë 6 Æ Ç · , : ; ¢ / ‹ Â

‹ T ,

X 3em$/e(15 Â

8

7 8 å ‹ Â

‰¼ U § 7 8 ‹

```
-- ‰¼Q R r
cd /opt/so;t<are/issed8
<:et    https://issed8-%+o8s+cn-north-4+m7hua<eicloud+com/issed8/centos-
x86_64/issed8-%+&+&-"ent64-x86_64-A33+tar+:.
E s t Q R r v s t NIIMBC-%+&+&-"ent64-648it-all+tar+:. u 4 v w +sha9%6 m
R x y z { | } ~ • € J,A'44-%&9&*K : #he /opt/so;t<are/issed8/issed8-
9+&+&- ed-at-648it+sha9%6 does not exist+
```

```
tar -.xv; NIIMBC-%+&+&-"ent64-648it-all+tar+:.
tar -.xv; NIIMBC-%+&+&-"ent64-648it-om+tar+:.
```

£ Í · , !

· , K9L ! { l / ~

¨ © H ² N ” N •] P

```
-- i j root 3 7
-- •/opt/so;t<are/issed8 U V , ƒ cluster_con;i:+xml mR
-- z { ; < „
cat @ cluster_con;i:+xmlLL06M
LNxml version12*+&2 encodin:12'#M-82N@
L 66#@
    LO-- l440PQ…† ‡ ˆ --@
    L"3'4#0 @
        L(A AM name12cluster/ame2 value12d8"luster2 /@
        L(A AM name12node/ames2 value12iso;tnode92 /@
        L(A AM name128acklp*s2 value12*C9+*68+*46+*692/@
        L(A AM name12l440PQApp(ath2 value12/opt/issed8*/app2 /@
        L(A AM name12l440PQ3o:(ath2 value12/opt/issed8*/lo:/issed82 /@
        L(A AM name12l440PQ#ool(ath2 value12/opt/issed8*/tool2 /@
        L(A AM name12core(ath2 value12/opt/issed8*/core;ile2/@
        L(A AM name12cluster#7pe2 value12sin:le-inst2/@
    L/"3'4#0 @
    LO-- ‰Š ‹Œ i j ‡ ˆ --@
    LP05l"03l4#@
        LO-- node*Œ i j ‡ ˆ --@
        LP05l"0 sn12*&&&&&*2@
            L(A AM name12name2 value12iso;tnode92/@
            L(A AM name12a./ame2 value12AR*2/@
            L(A AM name12a.(riorit72 value12*2/@
            LO-- „ • ‹ , Ž •@• ‘ 3 ’ 8ackl(* “ sshl(* ” ( •
l( --@
            L(A AM name128acklp*2 value12*C9+*68+*46+*692/@
            L(A AM name12sshlp*2 value12*C9+*68+*46+*692/@

            LO--d8node--@
            L(A AM name12data/um2 value12*2/@
            L(A AM name12data(ortQase2 value1296&&&2/@
            L(A AM name12data/ode*2 value12/opt/issed8*/data/d8*2/@
        L/P05l"0@
    L/P05l"03l4#@
L/ 66#@
06M
```

‹ œ

Ë Ã A N	‹	× Ø
ù ² • €	'ame	l 6 2 •

```
Qe:in to distri8ute packa:e to packa:e path+
4uccess;ull7 distri8ute packa:e to packa:e path+
4uccess;ull7 distri8uted packa:e+
Are 7ou sure 7ou <ant to create the userJommK and create trust ;or it
(7es/no!N 7es -- ª « 7es
(lease enter pass<ord ;or cluster user+
(ass<ord: -- • omm ¬ -
(lease enter pass<ord ;or cluster user a:ain+
(ass<ord: -- ® ª « omm ¬ -
,enerate cluster user pass<ord ;iles success;ull7+

4uccess;ull7 created JommK user on all nodes+
(reparin: 44- service+
4uccess;ull7 prepared 44- service+
Installin: the tools in the cluster+
4uccess;ull7 installed the tools in the cluster+
"heckin: hostname mappin:+
4uccess;ull7 checked hostname mappin:+
"reatin: 44- trust ;or JommK user+
(lease enter pass<ord ;or current userJommK+
(ass<ord: -- ª « omm ¬ -
"heckin: net<ork in;ormation+
All nodes in the net<ork are /ormal+
4uccess;ull7 checked net<ork in;ormation+
"reatin: 44- trust+
"reatin: the local ke7 ;ile+
4uccess;ull7 created the local ke7 ;iles+
Appendin: local IP to authori.ed_ke7s+
4uccess;ull7 appended local IP to authori.ed_ke7s+
'pdatin: the kno<n_hosts ;ile+
4uccess;ull7 updated the kno<n_hosts ;ile+
Appendin: authori.ed_ke7 on the remote node+
4uccess;ull7 appended authori.ed_ke7 on all remote node+
"heckin: common authentication ;ile content+
4uccess;ull7 checked common authentication content+
Pistri8utin: 44- trust ;ile to all node+
Pistri8utin: trust ke7s ;ile to all node success;ull7+
4uccess;ull7 distri8uted 44- trust ;ile to all node+
5eri;7in: 44- trust on all hosts+
4uccess;ull7 veri;ied 44- trust on all hosts+
4uccess;ull7 created 44- trust+
4uccess;ull7 created 44- trust ;or JommK user+
"heckin: 64 so;t<are+
4uccess;ull7 check os so;t<are+
"heckin: 64 version+
4uccess;ull7 checked 64 version+
"reatin: clusterDs path+
4uccess;ull7 created clusterDs path+
4et and check 64 parameter+
4ettin: 64 parameters+
4uccess;ull7 set 64 parameters+
Uarnin:: Installation environment contains some <arnin: messa:es+
(lease :et more details 87 2/opt/so;t<are/issed8/script/:s_checkos -i A
-h node*Fnode9FNIIMBC-d8= --detail2+
4et and check 64 parameter completed+
```

```
(reparin: " 6/ service+
4uccess;ull7 prepared " 6/ service+
4ettin: user environmental varia8les+
4uccess;ull7 set user environmental varia8les+
4ettin: the d7namic link li8rar7+
4uccess;ull7 set the d7namic link li8rar7+
4ettin: "ore ;ile
4uccess;ull7 set core path+
4ettin: pssh path
4uccess;ull7 set pssh path+
4ettin: ":roup+
4uccess;ull7 set ":roup+
4et A M 6ptimi.ation+
/o need to set A M 6ptimi.ation+
Mixin: server packa:e o<ner+
4ettin: ;inish ;la:+
4uccess;ull7 set ;inish ;la:+
```

```
@ --dn-:uc12shared_8u;;ers1*98MQ2 X
[redacted]_si.e1*98MQ2 X
@ --dn-:uc12cstore_8u;;ers1*6MQ2
(arsin: the con;i:uration ;ile+
"heck preinstall on ever7 node+
4uccess;ull7 checked preinstall on ever7 node+
"reaAin: the 8ackup director7+
4uccess;ull7 created the 8ackup director7+
8e:in deplo7++
Installin: the cluster+
8e:in prepare Install "luster++
"heckin: the installation environment on all nodes+
8e:in install "luster++
Installin: applications on all nodes+
4uccess;ull7 installed(on all n
8e:in init Instance++
encr7pt cipher and rand ;iles ;or data8ase+
(lease enter pass<ord ;or data8ase:
            ıt ;or data8ase:
J,A'44-%&=&6K : #he pass<ord o; data8ase is incorrect+#he t<o pass<ords
are di;;erentF please enter pass<ord a:ain+
(lease enter pass<ord ;or data8ase:
(lease repeat ;or data8ase:
8e:in to create "A cert ;iles
#he        sslcert        <ill        8e        :enerated        in
&opt/ias4Ä8/ins%@ll/ap/sh@e/ss;dec"r/o c:pQ"^ or data    a pco.o9u_iXD p/sh;
[redacted]ñ43st ;o.@Ve/e 1 e    c    c"rea0cpc cr v £"8a ast ;olde pt
```

```
su - omm
```

2 Z 2 ... 7 8 & ' è w x Â

```
cd /opt/so;t<are/issed8/script
```

2 Z 3 Å ¸ « ¼‰ Š Â

```
+/:s_uninstall
```

« ¼ U ‘ ¤ v e 7 8 © DIBC & ' { ï 7 8 w x S(SS)D*G69) R w x ~

K DIBC Q 1 2 , ƒ é • š v ò æ > Ë Ã Â

".&.& O P b c

† ‡ ˆ t

7 8 ” •

î $ % (SS)D* ý l ý m 9 : · Ã v $ % 1 2 ” • ^ ‰ #

1 2	× Ø
À Á ± ƒ	2 ú • d 6 E F 6
L M : ;	; < Â Š 5 Ã
! 1 2 ” •	Q R 5 Ã
À ! 1 2 ” •	Ä R 5 Ã

7 8 › &

! -

• € ä) · ,

: w 2 •	¬ - × Ø	m 5
l 6 2	4$de1¥4$de2	l m l 6 2
(1 B ¢	192.168.146.130¥192.168.146.131	l m l 6 2 (1

: w 2 •	¬ - × Ø	m 5
ä) ¯	5000 ¥ 26000	cm ! ^ ä) ¥ D*'$de ! ^ ä)

» 2 VW

: w 2 •	2 •	¤ A N	V W Í t
» 2	$mm	L M : ;	‹ “ ® 3
2	dbg#p	L M : ;	‹ “ ® 3

! w x VW

w x 2 •	R 2 •	w x M
<$pt<s$+Da#e<&ssedb	s$+Da#e	7 8 ! X ó w x
<$pt<&ssedb<app	(SS)D*-pp1ath	7 8 w x
<$pt<&ssedb<!$g<&ssedb	(SS)D*L$g1ath	G r w x
<$pt<&ssedb<data<d1<	data4$de1	I m / X ó w x
<$pt<&ssedb<tmp	tmp 9 ppdb1ath	– ì ! w x
<$pt<&ssedb<t$$!	(SS)D*2$$!1ath	s ˆ w x
<$pt<&ssedb<c$#eR!e	c$#e1ath	c$#e ! w x
<$pt<&ssedb<cm	cmD&#	5 9 w x

T , @ / l 6 2 •

2 Z 1 Ù ô è @ / Å ¸ #

```
5i /etc/hostname
0/hostname
```

• 0/hosb ̀me0 •° 4–` 0 7 “Sf` 0/hopYA$f̀metHgiAhaH'4pvIvl4A ̀dC•

```
hostnamectl set-hostname node9  E • a b c   i j *C9+*68+*46+*=*   z {
```

2 Z 2 T , @ / <etc<h$sts

```
vi /etc/hosts
*C9+*68+*46+*=& node*
*C9+*68+*46+*=* node9
```

£ Í 7 8 » K w x

2 Z 1 î #$$t » [x L M : ; Â

2 Z 2 £ Í 7 8 » { § £ j ~ v T ! " Þ 8 { N ” ˆ q T … 2 o

ü U ¦ ý ø ~ Â

```
useradd -m omm
pass<d omm)9&9=
```

ÅÆÇ ; < 3 7 8 ‘ 3 È O P a b c m R É A “ É 4 5 µ { Ê Ë]

P Â

2 Z 3 { l / ~ £ Í ! w x { § £ j ~

```
mkdir -p /opt/so;t<are/issed8/
chmod $%% -  /opt/so;t<are
```

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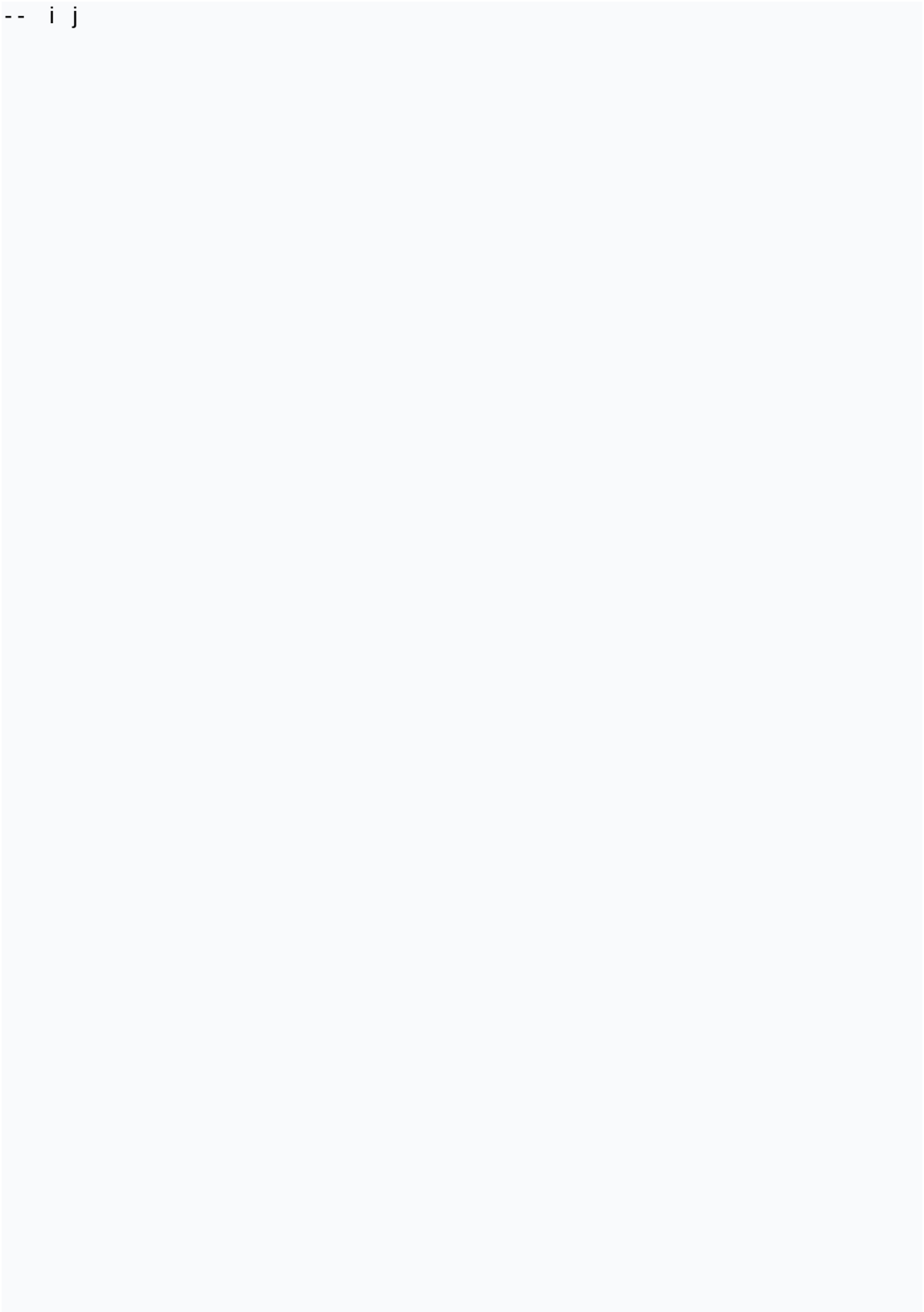

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      LO--d8node--@
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d8*2/@
      LO--PQnode i j Œ • Æ ( ) Ø +   i j a--@
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        L/P05l"0@

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(hostname! --@
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            L(A AM name12name2 value12op_slave2/@
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l( --@
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            L(A AM name12cmPir2 value12/opt/issed8/install/data/cm2 /@
        L/P05l"0@
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>3P_3IQ A S_(A#-

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/opt/so;t<are/issed8/cluster_con;i:+xml
E | z { – — ˜ ™ e f š › œ • ž so;t<are U V m R å | š i j ’ i j
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(lease enter pass<ord ;or current userJommK+
(ass<ord:   -- ª « omm ¬ -
"heckin: net<ork in;ormation+
All nodes in the net<ork are /ormal+
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Jroot)op_master scriptKE /opt/so;t<are/issed8/script/:s_checkos -i A -h
op_masterFop_slave --detail
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2=+*&+&-C%$+el$+x86_642+
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   A6+ J 47stem control parameters status K                     : /ormal
       All values a8out s7stem control  parameters are correct+
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   A8+ J Pisk con;i:uration status K                            : /ormal
        #he value a8out TM4 mount parameters is correct+
   AC+ J (re-read 8lock si.e status K                           : /ormal
       #he value a8out 3o:ical 8lock si.e is correct+
   A**+J /et<ork card con;i:uration status K                   : Uarnin:
        Jop_slaveK
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    A*9+J #ime consistenc7 status K                               :
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         #he /#(P not detected on machine and local time is 29&9=-&$-9%
*%:9=:442+
        Jop_slaveK
         #he /#(P not detected on machine and local time is 29&9=-&$-9%
*%:9=:442+
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53) -2) D-2- *-S)

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testdbAd 53) -2) 2- *L) test2(c$! & ' t)©

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›pub!&c ^ test1 ^ tab!e ^ $mm ^ e$#&e ' ta8$ ' A#$D8c$mp#ess&$ ' A ' $f

›pub!&c ^ test2 ^ tab!e ^ $mm ^ e$#&e ' ta8$ ' A#$D8c$mp#ess&$ ' A ' $f

(2 #$Ds)

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©ª¥ ' s A # ‰ ß i š ú ˆ t

<$pt<bac"up<bac"up.s ! 7p 26000 testdb 7> p

gs_dump_p$#tAY26000Ya_testdba_2023707727 19Q53Q31aQ 2he t$ta! $b\ects 'umbe# &s 432.

gs_dump_p$#tAY26000Ya_testdba_2023707727 19Q53Q31aQ _100.00Ja 432 $b\ects ha/e bee' dumped.

gs_dump_p$#tAY26000Ya_testdba_2023707727 19Q53Q31aQ dump database testdb successUu!!%

gs_dump_p$#tAY26000Ya_testdba_2023707727 19Q53Q31aQ t$ta! 8meQ 1563 ms

y z p q #

›

77 • » test v Å ¸ gs_dump • ‘ © s ! / v p q å temp!ate1

#

_$mm ` &s$+'$de2 bac"upaS gs ! 7d temp!ate1 7O test 7 ; huaDe& ` 1234 7p 26000

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p q ‹ !

_#$$t `&s$+'$de2 db1ad !! <$pt<&ssedb1<data<db1<pg_hba.c$'U

<$pt

m&'&mum LS4 &sQ 0<0.

_2023707728 09Q43Q59aQbeg&' bu&!d tab!espace !&st

_2023707728 09Q43Q59aQR'&sh bu&!d tab!espace !&st

_2023707728 09Q43Q59aQbeg&' get F!$g b% F!$&st#eam

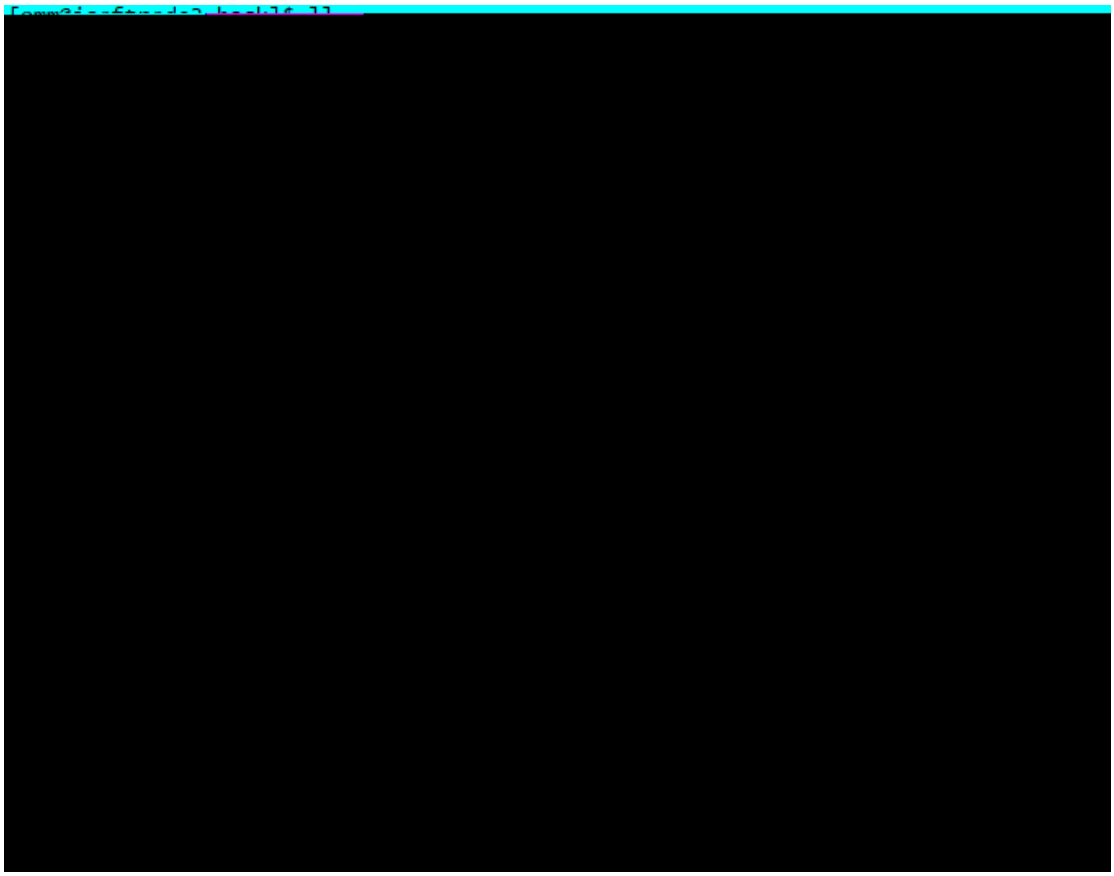
_2023707728 09Q43Q59aQ chec" &de'8U% s%stem success

_2023707728 09Q43Q59aQ se'd S2-32_3)1L(5-2(64 0<7000000 success

_2023707728 09Q43Q59aQ "eepa!&/e message &s #ece&/ed

_2023707728 09Q43Q59aQ "eepa!&/e message &s #ece&/ed

_2023707728 09Q44Q04aQgs_basebac"upQ base bac"up successUu!!%



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(4>6Q ($ "ssGe0 (4>6Q *ac"up cata!$g Y<$pt<p#$bac"upY successUu!!% & ' &ted

_$mm ` &s$+ ' $de2 p#$bac"upaS !!

d$DF777777. t$ta! 02 $mm dbg#pS ` a!28b!áubúb@02 &

d#DF777777. 2 $mm dbg#p 6 ?u! 28 10Q37 bac"ups

d#DF777777. 2 $mm dbg#p 6 ?u! 28 10Q37 Da!

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$mm ` &s$+'$de2 &'sta'ce!$ca!aS gs_p#$bac"up set7c$'Rg 7* <$pt<p#$bac"up< 77

&'sta'ceA&'sta'ce_!$ca! 7d testdb 7p 26000

$mm ` &s$+'$de2 &'sta'ce!$ca!aS cat pg_p#$bac"up.c$'U

d *ac"up &'sta'ce &'U$#ma8$'

pgdata A <$pt<&ssedb1<data<db1

s%stem7&de'8Re# A 3423299692713438

d 5$''ec8$' pa#amete#s

pgdatabase A testdb

pgp$#t A 26000

$mm ` &s$+'$de2 &'sta'ce!$ca!aS gs_p#$bac"up bac"up 7* <$pt<p#$bac"up< 77

&'sta'ce &'sta'ce_!$ca! 7d testdb 7b >0LL

(4>6Q *ac"up sta#tB gs_p#$bac"up /e#s&$'Q 2.4.2B &'sta'ceQ &'sta'ce_!$ca!B bac"up (DQ

_2023707728 11Q45Q08aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q45Q13aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q45Q18aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q45Q23aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q45Q28aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q45Q33aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q45Q38aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q45Q44aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q45Q49aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q45Q55aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q46Q01aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q46Q06aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q46Q11aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q46Q17aQ "eepa!&/e message &s #ece&/ed

(4>6Q Data R!es a#e t#a'sUe##edB 8me e!apsedQ 1mQ20s

(4>6Q Da&t U$# pg_st$p_bac"up()

(4>6Q pg_st$p bac"up() successUu!!% eFecuted

L6 ,Q st$p_!s'Q 0<9000308

L6 ,Q L$$"&'g U$# LS4 0<9000308 &' segme't Q 000000010000000000000009

(4>6Q ; a&t U$# LS4 0<9000308 &' st#eamed ; -L segme't <$pt<p#$bac"up<bac"ups<&'sta'ce_!$ca!<3:G 9) ; <database<pg_F!$g<00000001000 0000000000009

L6 ,Q >$u'd ; -L segme'tQ <$pt<p#$bac"up<bac"ups<&'sta'ce_!$ca!<3:G 9) ; <database<pg_F!$g<00000001000 0000000000009

L6 ,Q 2h#ead _0aQ 6pe'&'g ; -L segme't h<$pt<p#$bac"up<bac"ups<&'sta'ce_!$ca!<3:G 9) ; <database<pg_F!$g<00000001000 0000000000009h

L6 ,Q >$u'd LS4Q 0<9000308

L6 ,Q R'&shed st#eam&'g ; -L at 0<-000000 (8me!&'e 1)

L6 ,Q , e g 'g the 3ec$/e#% 2&me U#$m ; -L

L6,Q 2h#ead _0aQ 6pe'&'g ;-L segme't

h<$pt<p#$bac"up<bac"ups<&'sta'ce_!$ca!<3:G9) ; <database<pg_F!$g<00000001000 0000000000009h

(4>6Q S%'c&'g bac"up R!es t$ d&s"

(4>6Q *ac"up R!es a#e s%'cedB 8me e!apsedQ 0

(4>6Q Ha!&da8'g bac"up 3:G9) ;

(4>6Q *ac"up 3:G9) ; data R!es a#e /a!&d

(4>6Q *ac"up 3:G9) ; #es&de't s&MeQ 636 9 *

(4>6Q *ac"up 3:G9) ; c$mp!eted

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$mm ` &s$+'$de2 &'sta'ce!$ca!aS gs_p#$bac"up sh$D 7* <$pt<p#$bac"up< 77 &'sta'ce &'sta'ce_!$ca!

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>('sta'ce He#s&$' (D 3ec$/e#% 2&me 9$de ;-L 9$de 2L(2&me Data ;-L .#a8$ Sta#t LS4 St$p LS4 2%pe Status

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>&'sta'ce_!$ca! 9.2 3:G4G7 2023707728 12Q07Q58E08 >0LL S23)-9 1<0 6s 620 9 * 16 9 * 1.00 0<D000028 0<D0001)8 >(L) 6=

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_$mm ` &s$+'$de2 caS gs ! 7d testdb 7p 26000 7#

gs ! ((&ssedb 5.0.0 bu&!d 4ec82cbe) c$mp&!ed at 2023707727 09Q58Q20 c$mm&t 0 !ast m#)

4$'7SSL c$''ec8$' (SSL c$''ec8$' &s #ec$mme'ded Dhe' #e u&#&'g h&gh7secu#&t%)

2%pe hhe!ph U$# he!p.

```
testdbAd Wd
›››››››››››››››››››››››››L&st $U #e!a8$'s
›Schema ^ 4ame  ^ 2%pe  ^ 6D'e# ^           St$#age
77777777E77777777E77777777E77777777E7777777777777777777777777777777777
›pub!&c ^ test1 ^ tab!e ^ $mm   ^ e$#&e'ta8$'A#$DBc$mp#ess&$'A'$f
›pub!&c ^ test2 ^ tab!e ^ $mm   ^ e$#&e'ta8$'A#$DBc$mp#ess&$'A'$f
(2 #$Ds)

testdbAd Wd test1
›››››2ab!e hpub!&c.test1h
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›c$!    ^ &'tege# ^

testdbAd &'se#t &'t$ test1 /a!ues(111)C
(4S)32 0 1
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_$mm ` &s$+'$de2 &'sta'ce_!$ca!aS gs_p#$bac"up   bac"up 7* <$pt<p#$bac"up< 77
&'sta'ce &'sta'ce_!$ca! 7d testdb 7b 123-5=
(4>6Q *ac"up sta#tB gs_p#$bac"up /e#s&$'Q 2.4.2B &'sta'ceQ &'sta'ce_!$ca!B bac"up (DQ
3:G402B bac"up m$deQ 123-5=B Da! m$deQ S23)-9B #em$teQ Ua!seB c$mp#ess7
a!g$#&thmQ '$'eB c$mp#ess7!e/e!Q 1
L6 ,Q *ac"up des8'a8$' &s&'&8a!&Med
L6 ,Q 2h&s &ssedb &'sta'ce Das &'&8a!&Med D&th data b!$c" chec"sums. Data b!$c"
c$##up8$' D&!! be detected
L6 ,Q Database bac"up sta#t
L6 ,Q Latest /a!&d >0LL bac"upQ 3:G 9 ) ;
(4>6Q 1a#e't bac"upQ 3:G 9 ) ;
L6 ,Q sta#ted st#eam&'g ; -L at 0<*000000 (8me!&'e 1)
```

_2023707728 11Q58Q06aQ chec" &de'8U% s%stem success

_2023707728 11Q58Q06aQ se'd S2-32_3)1L(5-2(64 0<*000000 success

_2023707728 11Q58Q06aQ "eepa!&/e message &s #ece&/ed

(4>6Q 1, D-2- s&MeQ 6209 *

L6, Q 5u##e't t!&Q 1

L6, Q 1a#e't sta#t_!s'Q 0<9000028

L6, Q sta#t_!s'Q 0<*000028

(4>6Q)Ft#ac8'g pagemap $U cha'ged b!$c"s

(4>6Q cha'ge b&tmap sta#t !s' !$ca8$' &s 0<9000028

(4>6Q cha'ge b&tmap e'd !s' !$ca8$' &s 00000000<0*000028

(4>6Q 1agemap successUu!!% eFt#actedB 8me e!apsedQ 0 sec

_2023707728 11Q58Q06aQ "eepa!&/e message &s #ece&/ed

(4>6Q Sta#t t#a'sUe##&'g data R!es

_2023707728 11Q58Q11aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q58Q16aQ "eepa!&/e message &s #ece&/ed

(4>6Q Data R!es a#e t#a'sUe##edB 8me e!apsedQ 13s

(4>6Q Da&t U$# pg_st$p_bac"up()

(4>6Q pg_st$p bac"up() successUu!!% eFecuted

L6, Q st$p_!s'Q 0<*0001)8

L6, Q L$$"&'g U$# LS4 0<*0001)8 &' segme'tQ 00000001000000000000000*

(4>6Q ; a&t U$# LS4 0<*0001)8 &' st#eamed ; -L segme't <$pt<p#$bac"up<bac"ups<&'sta'ce_!$ca!<3:G402<database<pg_F!$g<0000000100000 0000000000*

_2023707728 11Q58Q24aQ "eepa!&/e message &s #ece&/ed

L6, Q p#$bac"up<bac"ups<&'sta'ce_!$ca!<3:G402<database<pg_F!$g<0000000100000

L6 , R ' shed st#eam ' g ; - L at 0<5000000 (8me! ' e 1)

L6 , , e g ' g the 3ec$/e#% 2me U#$m ; - L

L6 , 2h#ead _0a 6pe ' ' g ; - L segme ' t h<$pt<p#$bac"up<bac"ups< ' sta ' ce_!$ca!<3 : G402<database<pg_F!$g<000000010000 00000000000*h

(4>6 S% ' c ' g bac"up R!es t$ d s"

(4>6 *ac"up R!es a#e s% ' ced 8me e!apsed 0

(4>6 Ha! da8 ' g bac"up 3 : G402

(4>6 *ac"up 3 : G402 data R!es a#e /a! d

(4>6 *ac"up 3 : G402 #es de ' t s Me 273 9 *

(4>6 *ac"up 3 : G402 c$mp!eted

4 f m o g ,

$mm ` s$+ ' $de2 ' sta ' ce!$ca!aS gs_p#$bac"up sh$D 7* <$pt<p#$bac"up< 77 ' sta ' ce ' sta ' ce_!$ca!

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›(' sta ' ce He#s $ ' (D 3ec$/e#% 2me 9 $de ; - L 9 $de 2L(2me Data ; - L .#a8$ Sta#t LS4 St$p LS4 2%pe Status

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› ' sta ' ce_!$ca! 9.2 3 : G4(7 2023707728 12 08 32E08 123 - 5= S23) - 9 1<1 6s 257 9 * 16 9 * 1.00 0<>000028 0<>0001) 8 >(L) 6=

› ' sta ' ce_!$ca! 9.2 3 : G4G7 2023707728 12 07 58E08 >0LL S23) - 9 1<0 6s 620 9 * 16 9 * 1.00 0<D000028 0<D0001) 8 >(L) 6=

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$mm ` &s$+ ' $de2 & ' sta ' ce!$ca!aS gs_p#$bac"up me#ge 7* <$pt<p#$bac"up< 77 & ' sta ' ce & ' sta ' ce_!$ca! 7& 3 : G4(7

(4>6Q 9 e#ge sta#ted

(4>6Q 9 e#g& ' g bac"up 3 : G4(7 D&th pa#e ' t cha& '

(4>6Q Ha!&date pa#e ' t cha& ' U$# bac"up 3 : G4(7

(4>6Q Ha!&da8 ' g bac"up 3 : G4G7

(4>6Q *ac"up 3 : G4G7 data R!es a#e /a!&d

(4>6Q Ha!&da8 ' g bac"up 3 : G4(7

(4>6Q *ac"up 3 : G4(7 data R!es a#e /a!&d

L6 , Q 3est$#e d&#ect$#&es a ' d s%m!& ' "s... & '

<$pt<p#$bac"up<bac"ups<& ' sta ' ce_!$ca!<3 : G4G7<database

(4>6Q Sta#t me#g& ' g bac"up R!es

L6 , Q 5#ea8 ' g page heade# map

h<$pt<p#$bac"up<bac"ups<& ' sta ' ce_!$ca!<3 : G4G7<page_heade#_map_tmph

(4>6Q *ac"up R!es a#e successUu!!% me#gedB 8me e!apsedQ 8s

(4>6Q De!eteQ 3 : G4(7 20237077 28 12Q08Q32E08

L6 , Q 3e ' ame <$pt<p#$bac"up<bac"ups<& ' sta ' ce_!$ca!<3 : G4G7 t$

<$pt<p#$bac"up<bac"ups<& ' sta ' ce_!$ca!<3 : G4(7

(4>6Q 3e ' ame me#ged Uu!! bac"up 3 : G4G7 t$ 3 : G4(7

(4>6Q Ha!&da8 ' g bac"up 3 : G4(7

(4>6Q *ac"up 3 : G4(7 data R!es a#e /a!&d

(4>6Q 9 e#ge $U bac"up 3 : G4(7 c$mp!eted

$mm ` &s$+ ' $de2 & ' sta ' ce!$ca!aS !!

t$ta! 4

7#D7777777. 1 $mm dbg#p 159 ?u! 28 11Q44 pg_p#$bac"up.c$ ' U

d#DF777777. 3 $mm dbg#p 97 ?u! 28 12Q10 3 : G4(7

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_$mm ` &s$+ ' $de2 caS gs ! 7d p$stg#es 7p 26000 7#

gs ! ((&ssedb 5.0.0 bu&!d 4ec82cbe) c$mp&!ed at 2023707727 09Q58Q20 c$mm&t 0 !ast m#)

4$'7SSL c$''ec8$' (SSL c$''ec8$' &s #ec$mme'ded Dhe' #e u&#&'g h&gh7secu#&t%)
2%pe hhe!ph U$# he!p.

&ssedbAd d#$p database testdb(

D361 D-2-*-S)

_$mm ` &s$+'$de2 caS gs ! 7d testdb 7p 26000 7#

gs !Q >-2-LQ database htestdbh d$es '$t eF&st

• #est$#e ¾‰ Š — v h i (SS)D* & v û ^ * db1 w x

_$mm ` &s$+'$de2 caS gs_ct! st$p 7D <$pt<&ssedb1<data<db1

_20237077 28 12Q18Q57.916a_79294a_a_gs_ct!aQ gs_ct! st$pped Bdatad&# &s <$pt<&ssedb1<data<db1

Da&8'g U$# se#/e# t$ shut d$D'..... d$'e

se#/e# st$pped

_#$$t ` &s$+'$de2 cad cd <$pt<&ssedb1<data

_#$$t ` &s$+'$de2 dataad m/ db1 db1_ba"

Å ¸ #est$#e p q å ë • —© g ,

$mm ` &s$+'$de2 &'sta'ce!$ca!aS gs_p#$bac"up #est$#e 7* <$pt<p#$bac"up< 77 &'sta'ce &'sta'ce_!$ca! 7D <$pt<&ssedb1<data<db1 7& 3:G4(7

L6 ,Q 3est$#e beg&'.

L6 ,Q chec" tab!espace d&#ect$#&es $U bac"up 3:G4(7

L6 ,Q chec" eFte#'a! d&#ect$#&es $U bac"up 3:G4(7

(4>6Q Ha!&da8'g bac"up 3:G4(7

(4>6Q *ac"up 3:G4(7 data R!es a#e /a!&d

L6 ,Q 2h#ead _1aQ 6pe'&'g ;-L segme't h<$pt<p#$bac"up<bac"ups<&'sta'ce_!$ca!<3:G4(7<database<pg_F!$g<000000010000 00000000000>h

(4>6Q *ac"up 3:G4(7 ;-L segme'ts a#e /a!&d

(4>6Q *ac"up 3:G4(7 &s /a!&d.

(4>6Q 3est$#&'g the database U#$m bac"up at 2023707728 12Q08Q31E08

L6 ,Q 3est$#e d&#ect$#&es a'd s%m!&'"s... &' <$pt<&ssedb1<data<db1

(4>6Q Sta#t #est$#&'g bac"up R!es. 1 , D-2- s&MeQ 636 9 *

L6 , Q Sta#t th#ead 1

(4>6Q *ac"up R!es a#e #est$#ed. 2#a'sUe#ed b%tesQ 1000 9 *B 8me e!apsedQ 28s

(4>6Q 3est$#e &'c#eme'ta! #a8$ (!ess &s beNe#)Q 157 J (1000 9 *<636 9 *)

(4>6Q S%'c&'g #est$#ed R!es t$ d&s"

(4>6Q 3est$#ed bac"up R!es a#e s%'cedB 8me e!apsedQ 1s

(4>6Q 3est$#e $U bac"up 3:G4(7 c$mp!eted.

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_$mm ` &s$+'$de2 caS gs_ct! sta#t 7D <$pt<&ssedb1<data<db1

_20237077 28 12Q22Q08.206a_79316a_a_gs_ct!aQ gs_ct! sta#tedBdatad&# &s <$pt<&ssedb1<data<db1

_20237077 28 12Q22Q12.404a_79316a_a_gs_ct!aQ Da&8'g U$# se#/e# t$ sta#t...

.0 L6 , Q _-!a#m 9 $du!eaca' '$t #ead , -0SS_ ; -34(4 , _2:1) e'/.

0 L6 , Q _-!a#m 9 $du!eaG$st 4ameQ &s$+'$de2

0 L6 , Q _-!a#m 9 $du!eaG$st (1Q &s$+'$de2. 5$p% h$st'ame d&#ect!% &' case $U ta"&'g 10s t$ use Ygeth$stb%'ameY Dhe' <etc<h$sts d$es '$t c$'ta&' @G6S2 (1O

0 L6 , Q _-!a#m 9 $du!ea5!uste# 4ameQ db5!uste#

0 L6 , Q _-!a#m 9 $du!ea('/a!&d data &' -!a#m(tem R!ei 3ead a!a#m)'g!&sh 'ame Ua&!edi !&'eQ 57

0 ; -34(4 , Q Ua&!ed t$ $pe' Ueatu#e c$'t#$! R!eB p!ease chec" Dhethe# &t eF&stsQ >&!e4ameA(SS)D*./e#s&$'B)##'$A2B)##messageA4$ such R!e $# d&#ect$#%.

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2023707728 12Q22Q13.187 64c34274.1 _u'"'$D'a 139730238255360 _u'"'$D'a 0 d'_6001 D*010 0 _3)D6a L6 ,Q 3ec$/e#% pa#a!!e!&smB cpu c$u't A 2B maF A 4B actua! A 2

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2023707728 12Q22Q13.399 64c34274.1 _u'"'$D'a 139730238255360 _u'"'$D'a 0 d'_6001 00000 0 _*-5=)4Da L6 ,Q _-!a#m 9$du!eaca' '$t #ead ,-0SS_ ;-34(4 ,_2:1) e'/.

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.2023707728 12Q22Q13.416 64c34274.1 _u'"'$D'a 139730238255360 _u'"'$D'a 0 d'_6001 00000 0 _*-5=)4Da L6 ,Q !$aded !&b#a#% hsecu#&t%_p!ug&'h

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2023707728 12Q22Q13.418 64c34274.1 _u'"'$D'a 139730238255360 _u'"'$D'a 0 d'_6001 01000 0 _*-5=)4Da ;-34(4 ,Q c$u!d '$t c#eate a'%G- 251<(1 s$c"ets

2023707728 12Q22Q13.421 64c34274.1 _u'"'$D'a 139730238255360 _u'"'$D'a 0 d'_6001 00000 0 _*-5=)4Da L6,Q ('&t4uma 'uma4$de4umQ 1 'uma_d&st#&bute_m$deQ '$'e&'he#&t2h#ead1$$!Q 0.

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2023707728 12Q22Q14.278 64c34274.1 _u'"'$D'a 139730238255360 _u'"'$D'a 0 d'_6001 00000 0 _5-5G)a L6,Q set data cache s&Me(12582912)

2023707728 12Q22Q17.650 64c34274.1 _u'"'$D'a 139730238255360 _u'"'$D'a 0 d'_6001 00000 0 _S),9)42_1-,)a L6,Q Segme't7page c$'sta'tsQ D>_9-1_S(.)Q 8156B D>_9-1_*(2_542Q 65248B D>_9-1_,3601_)K2)42SQ 4175872B (1*L65=_S(.)Q 8168B)K2)42S_1)3_(1*L65=Q 1021B (1*L65=_,3601_S(.)Q 4090B *92_G)-D)3_L)H)L0_262-L_1-,)SQ 8323072B *"t9ap)'t#%4umbe#1e#*!$c"Q 2038B *"t9ap*!$c"4umbe#Q 25B *"t*&t9aF9ap5'tQ 512

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2023707728 12Q22Q18.419 64c34274.1 _u'"'$D'a 139730238255360 _u'"'$D'a 0 d'_6001 00000 0 _*-5=)4Da L6,Q c#eate &ssedb state R!e successQ db state(S2-32(4,_S2-2))B se#/e# m$de(4$#ma!)B c$''ec8$'&'deF(1)

2023707728 12Q22Q18.443 64c34274.1 _u'"'$D'a 139730238255360 _u'"'$D'a 0 d'_6001 00000 0 _*-5=)4Da L6,Q maF_saUe_Uds A 976B usab!e_Uds A 1000B a!#ead%_$pe' A 14

bb$F_dump_path &s set t$ <$pt<&ssedb1<c$#eR!e<

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10.10.10.1 &cmp_se A4 Des8'a8$' G$st 0'#eachab!e777 10.10.10.1 p&'g sta8s8cs 7774

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